

**UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF MISSOURI
EASTERN DIVISION**

MEMORANDUM OPINION

This action is brought pursuant to the provisions of the Federal Tort Claims Act (FTCA), 28 U.S.C. §§ 2671, et seq., arising out of injuries sustained by plaintiff C.M., a minor, (C.M.) during the labor and delivery of plaintiff Jasmine Lucius (plaintiff), beginning January 31, 2003 through February 1, 2003. C.M. was born on February 1, 2003. Plaintiff is the natural mother of C.M., and brings this case on behalf of C.M. as her Next Friend, as well as on her own individual claim.

This Court is vested with jurisdiction pursuant to 28 U.S.C. § 1346(b). The acts or omissions at issue occurred in St. Louis, Missouri; accordingly, this claim is governed by the substantive law of the State of Missouri. Rayonier v. United States, 352 U.S. 315, 319 (1957).

The defendant, United States of America, was at all times mentioned in the complaint acting by and through its medical personnel, principally Jonathan R. Reed, M.D. Dr. Reed was employed by St. Louis Comprehensive Health Center (SLCH) n/k/a Myrtle Hilliard Davis Health Center. SLCH is a federally funded Community Health Care facility that was deemed eligible for

Federal Tort Claims Act coverage, pursuant to the Federally Supported Health Centers Assistance Act of 1992 (Pub.L.102-501).

As Dr. Reed is alleged to have been negligent during the labor of plaintiff and the delivery of C.M., the parties do not dispute that as Dr. Reed was, in effect, the employee of the U.S.A., the U.S.A. is the proper defendant in this action.

Prior to bringing this cause of action, plaintiffs timely filed and exhausted all administrative remedies required pursuant to 28 U.S.C. §§ 2401(b), 2671 through 2675(a).

Background

Without objection, the Court received plaintiffs' Exhibits 1 through 8, 13 through 21 and 26 through 32 and 34 through 46. Exhibits 24, 25 and 33 were withdrawn by plaintiffs. Defendant did not further object to Exhibits 9 through 12 and 22 and 23 as they were received for demonstrative purposes only. As there was no objection, the Court also received portions of the deposition of Carolyn McCourt, M.D. and Latrice Poke, R.N. as set out in plaintiffs' pretrial response. The Court also received defendant's Exhibits A through Z and AA through II as illustrated on defendant's list of Exhibits set out in its pretrial. In addition, the separate report of Dr. Marianne Schuelein, marked as Exhibit D-1 and the research material group exhibit of Nurse Gibson, marked Exhibit K-1, were also received. For demonstrative purposes, the Court viewed a vacuum extractor as opposed to the illustrations of the extractor identified as Exhibit II. There were no objections to these exhibits. The Court also received portions of the deposition of Dr. Carolyn McCourt and Nurse Latrice Poke as identified in defendant's list of depositions to be used in the pretrial reports. All were received without objection.

During her pregnancy, plaintiff was a patient of Dr. Reed. The notes at Barnes Hospital (Barnes) reveal that plaintiff was admitted Friday, January 31, 2003 at 8:30 a.m. in an attempt to induce labor as she was approximately one week behind schedule. She ultimately delivered about 28 hours later at approximately 12:30 p.m. Saturday, February 1, 2003. She was discharged the following Monday, February 3, 2003, in the morning.

Dr. Reed was called by plaintiff as an adverse witness, and later testified in his own behalf. Although he works for SLCH, 70%-80% of his deliveries were at Barnes or Forest Park Hospital. He delivers an average of 20 babies per year and had no independent recollection of this case and testified principally by reviewing the hospital notes. Generally, he was able to testify only as to what was stated in the notes.

At the time of her admission, plaintiff was 17 years old and was 5 feet seven inches in height and weighed 147 pounds. She had a borderline sized pelvis and was culture-positive for Group B Beta Streptococcus.¹ Plaintiff was not in active labor at the time of admission and her temperature was 36.7 degrees Celsius and her blood pressure was 124/64. The monitoring revealed a fetal heart rate (FHR) in the 130-140 range.²

Dr. Reed was not present at the time of plaintiff's admission, but had left instructions with the nurses and other doctors on duty. Accordingly, following admission, a cervidil suppository was inserted in an effort to induce labor. At that point, plaintiff's cervical exam showed 1-2 cm.

¹ The testifying doctors generally agreed that when there is a positive culture of Group B Strep, at the inception of or at some time during labor, antibiotic therapy is required. There was disagreement on when antibiotic therapy should have been started.

² A normal heart rate for a fetus is 120-150. Generally, a monitor reading in excess of 150 is high.

dilated, 40-50% effaced and her Bishop's Score was 4.³

Throughout the day, January 31, 2003, the nurse's notes indicated that the FHR had moderate variability and accelerations, reassuring. The notes reveal that at 5:50 p.m. the dilation had not progressed and pursuant to Dr. Reed's instructions, a "foley bulb" was placed to assist in dilation or "cervical ripening." Plaintiff's progress during the night was uneventful; however, the nurse's notes indicate that at 1:30 a.m. on February 1, 2003 the foley bulb "fell out." In any event the use of the bulb apparently had some desired effect and at 2:00 a.m. plaintiff's cervix was 4 cm dilated. Again, the FHR demonstrated moderate variability and accelerations.

Plaintiff received an epidural for pain relief at 3:35 a.m. and at 3:57 a.m. she had progressed to 6 cm. dilation. The FHR panel showed a late appearing deceleration. At this stage, there was no evidence of hypoxia.⁴

The nurse's notes reveal that there were duty nurses who monitored plaintiff as well as resident physicians on duty.

The 4:30 a.m. nurse's notes stated that the FHR had changed from the earlier 100 -130 to 152 -170. The FHR was variable as the note at 4:40 a.m. showed the rate to be 130 - 140 with severe variables.

Nurse Tokes' note at 4:30 a.m. stated that there was "artificial rupture of membranes by Dr. Jain, clear fluid present. Fetal scalp electrode placed and intra-uterine pressure catheter placed by Dr. Jain." Dr. Ortega apparently examined plaintiff and either a nurse or one of the

³ Bishop's Score is a table used to determine how successful an induction of labor may be. A score of 9 is ideal. [Wikipedia](#), [The Free Encyclopedia](#).

⁴ Hypoxia is a deficiency of oxygen.

duty physicians telephoned an update to Dr. Reed. No new orders were given. The record is silent as to the precise conversation between Nurse Tokes and Dr. Reed.

The note at 4:40 a.m. stated that Dr. Jain performed an artificial rupture of the membrane, that the FHR rate was 130-140 with severe variables, that the variables are repetitive. The note stated "telephone update to Dr. Reed regarding above. No new orders at this time." Accordingly, it can be assumed that Dr. Reed was aware of the severe variable FHR and that plaintiff's membrane had been ruptured by Dr. Jain. The note would also suggest that Dr. Reed, with this information, did not give new orders. It is also documented that Dr. Reed was aware that plaintiff was Group B Strep Positive as he testified it was his common practice to make inquiries in this area.

A nursing note twenty minutes later at 5:00 a.m. described the FHR as "moderate." Oxytocin had previously been administered to plaintiff, discontinued and then restarted at 5:30 a.m. in an effort to promote the delivery. Nonetheless, plaintiff's cervix remained at six centimeters up to 7:30 a.m.

Nurse Agnes Holifield came on duty at 7:00 a.m. and she reviewed the records and examined plaintiff vaginally and checked C.M.'s FHR. She reported her findings to Dr. Reed by telephone at 7:30 a.m. telling him C.M.'s FHR was 170. In response to the 7:30 a.m. call, Dr. Reed ordered prophylactic antibiotic therapy.⁵

⁵ Although all of the doctors who testified stated that it fell below the proper standard of care in failing to administer antibiotic therapy earlier, this omission apparently was not the cause of the ultimate injury to C.M. C.M. did not develop Group B Strep Sepsis. After delivery, the sepsis workup revealed that C.M. was not affected by an intra-uterine infection. All of her cultures were negative. Accordingly, C.M. was not affected because of the delay in administering antibiotic therapy and if, in fact, Dr. Reed was negligent in failing to administer antibiotic therapy earlier, this was not a contributing factor to the fetal outcome of C.M.

The nurse's note revealed that at 10:35 a.m., plaintiff's temperature reached 39.2 Celsius which is 102.5 Fahrenheit. She also reported to Dr. Reed that plaintiff was dilated to eight centimeters as of 8:00 a.m. and remained in that position at 10:30 a.m. Nurse Holifield also had a vague recollection of Dr. Reed commenting that plaintiff may need a C-section. This was not verified in any of the hospital records.

Following his 10:35 a.m. conversation with Nurse Holifield, Dr. Reed stated that he would be coming to the hospital to attend plaintiff and perform the delivery. In addition, Dr. Reed ordered a Tylenol suppository, 1000 mg. per rectum and it was placed at 11:05 a.m. Five minutes earlier, plaintiff signed a consent for a caesarean section.

Sometime after 11:00 a.m., the fetal heart monitor indicated a late deceleration of C.M.'s heartbeat and near noon, there was a Bradycardia.⁶

Neither Nurse Holifield nor Dr. Reed have any independent recollection of the precise time he arrived at the hospital and examined the plaintiff; nor do any of the hospital records reveal this time. The records do show that Dr. Brock Meyer, a resident on call stated that at 11:30 a.m., Dr. Reed was not in the labor and delivery area. The fetal heart monitor, however, showed signs that plaintiff began pushing, that is the patient's attempt to promote delivery, at 11:50 a.m. Both Nurse Holifield and Dr. Reed testified that the first thing he did when he came to the hospital was to examine the plaintiff, following which he directed that she attempt to "push." Accordingly, Dr. Reed must have arrived in the delivery room, at the hospital, sometime between 11:30 and 11:50 a.m.

⁶ Bradycardia is a low heart beat as contrasted to Tachycardia which is a high heart beat in an infant.

The notes revealed that plaintiff was fully dilated at approximately 11:48 a.m. following which Dr. Reed advised the plaintiff to push, and when a normal delivery was apparently not working, Dr. Reed elected to effect delivery with the use of a vacuum extractor. Apparently that decision was also prompted because there was a late deceleration in the FHR pattern, followed by a fetal Bradycardia. The FHR monitor shows a drop in the baseline FHR from 190 to 90. The rate stayed at 90 until noon and increased to 200 at 12:15 p.m. and to 210 at 12:20 p.m. which indicated severe tachycardia.

During this time, Dr. Reed attempted to use a Mity-vac vacuum pump to assist in delivery. The Mity-vac electrical pump did not operate appropriately and Dr. Reed elected to use another pump which was hand-operated. The vacuum was attached to the head of C.M. but during the usage, the vacuum on the pump popped off. At that point, he elected to use a third vacuum extractor which was another hand-held pump referred to as a "kiwi." C.M. was delivered at 12:33 p.m. with the use of the third vacuum extractor.

The notes show that at the time of delivery, C.M. was limp and blue but was resuscitated with bag and mask ventilation. Eight hours later, twitching was noted and five hours thereafter there was a generalized seizure activity. She was then transferred to St. Louis Children's Hospital and a CT exam revealed a subgaleal hematoma. The MRI revealed diffuse ischemic injury. C.M.'s diagnosis at Children's Hospital was that she had hypoxic ischemic encephalopathy with neo-natal seizures.⁷ She was discharged Monday morning, February 3, 2003.

Although C.M. had received antibiotics, they were discontinued 48 hours after birth as her blood count was not indicative of infection, and her blood and spinal fluid cultures were negative.

⁷ Acute brain injury due to asphyxia (insufficient intake of oxygen).

Although there was a discharge diagnosis of meningitis, most of the doctors suggested that her blood culture was inconsistent with meningitis and that she was not infected at birth.

Following the hospital discharge of plaintiff and C.M., they returned to their home in St. Louis where they lived with Charles Morgan, plaintiff's boyfriend and C.M.'s father.

The trial in this case began February 2, 2006 at a time when C.M. was slightly over three years of age. From birth to the time of trial, C.M. was cared for by her mother and her grandmother. During this period plaintiff, Morgan and C.M. moved to St. Louis County where they were eligible to be involved in the county school system. Plaintiff and Morgan had another baby during this period and C.M. and the new baby and other children socialized with each other. At the hearing, most witnesses testified that plaintiff is unable to talk but does, occasionally, make some vowel sounds like "da."

C.M. was seen by a therapist as she had some difficulty in the use of her right hand and in clasping that hand. She no longer sees the therapist as the therapist's goals had been met.

C.M. had been enrolled in a speech therapy program but it was discontinued. Plaintiff testified that she would be unable to enroll C.M. in a speech therapy program until September 2006.

Plaintiff and C.M.'s grandmother both testified that it had been difficult to potty-train C.M., but they were making progress.

C.M. was examined by various pediatricians, neurologists, pediatric neuropsychologists and life-care planners. Several examined C.M. when she was about two years old and most right before or during the course of their testimony at trial.

All agreed that C.M. had some disabilities but there was substantial disagreement as to her

prognosis.

Dr. Robert C. Vennucci, a para-natal neurologist, testified that when he examined C.M. at the age of two years and one month, she had some paralysis of her right upper extremity and had an expressive language delay although her receptive language appeared to be more advanced. He felt that her paralysis would be permanent. He felt her expressive language skills would never develop entirely normally.

Barbara C. Fisher, a pediatric neuropsychologist testified as well that she examined C.M. when she was two years and one month of age. She stated that C.M. spoke a few words at her first examination but none when she saw her right before she testified. She felt C.M.'s prognosis was poor as to her language deficiency. She felt that C.M. would never be able to work or live alone, and will need 24-hour care. She agreed that C.M. has receptive communication and could follow instructions to some extent and moderately interact with people in her own environment.

Dr. Robert D. Voogt, a rehabilitation specialist testified that in July of 2004 he saw C.M., and she did not exhibit the same behavioral problems that Dr. Fisher had found eight months later. Yet, at the time of his testimony, he felt C.M. was worse than when Dr. Fisher had examined her. He stated that when he examined C.M. right before trial, she bit him, bit her mother and had a temper tantrum, pinched him and tried to tear up all of his papers. He believes that with therapy C.M. can overcome to some extent her speech deficit, but never fully. He believes that at some time she may be able to dress herself, use ordinary functions and be potty-trained.

Dr. Leah Ellenberg, a clinical psychologist examined C.M. on August 19, 2005 when she was two and a half years of age. She agreed that C.M. has a language deficit but has average receptive skills. She did not find aggression and felt that with proper speech and occupational

therapy, C.M. could develop so that she could live independently and have some type of employment. She agreed that C.M.'s IQ was 70 which was the bottom of borderline, but that it was difficult adequately to measure an IQ test because of C.M.'s age and impaired communication.

Dr. Marianne Schuelin, a pediatric neurologist, examined C.M. on July 9, 2005 and agreed that C.M. has some limitation of her right arm and a speech deficit. She also examined C.M. a half-hour before she testified and stated that she had used some words in the initial exam, but none right before the doctor testified. She felt C.M. had good motor skills but should have progressed more in speech from the time of her first exam to the time of trial. Had she had speech therapy during that time, the doctor felt her problem could have improved. She feels C.M. will be able to live independently as an adult but would need regular speech therapy to produce this result. She also felt that it is difficult to ascertain an IQ from a young person who is unable to communicate adequately. C.M. will not progress unless she has the proper therapy.

On several occasions during the trial, the Court had the opportunity to observe C.M. The first occasion occurred during the testimony of Dr. Russell D. Jelsema which began February 24, 2006 at 9:10 a.m. Plaintiff and C.M. came into the courtroom at that time. C.M. sat with her mother in the audience approximately four rows from the jury box. Plaintiff and C.M. left the courtroom at 10:10 a.m. and during the one-hour stay, the Court observed no problem. C.M. sat on her mother's lap or occasionally on one of the courtroom seats. There were no loud noises made nor did the Court observe any disturbance. C.M. walked into and out of the courtroom with her mother.

On another occasion during the testimony of plaintiff, C.M. was in the courtroom

audience with her father. At this time, plaintiff went to C.M. and sat on her lap in the witness box. At the direction of plaintiff, C.M. took a plastic cup and then replaced it on the witness stand. She waved "hi" to the Court and also waved to others in the audience, in particular, her father. This was in response to oral directions from plaintiff.

The Court found as plaintiff stated, that C.M. was not shy and frequently would approach anyone. During this time, C.M. did not appear afraid and was not intimidated by the Court, the courtroom or the participants. After C.M. left the witness box, she returned to the audience area with her father and during the testimony of plaintiff walked along the row of seats in the courtroom and on leaving the courtroom, skipped out with her father. During this time, plaintiff testified that she reads to C.M., attempts to talk with her and have her identify objects and occasionally, she can do so, such as a cup, spoon, TV, chair, door, cat or dog. She has no favorite food, but generally will eat what is prepared for her. If she is thirsty, she will take a cup and give it to plaintiff. She will let plaintiff know if she is afraid. She can use a bike with training wheels and likes to scoot with her feet. Apparently, her motor skills are normal for a three-year old. All of the experts generally agreed that C.M.'s neurological deficit was caused by systemic asphyxia and birth trauma. No one testified that it was all because of birth trauma or all because of asphyxia.

As to the methodology of delivery, all physicians who testified in that area suggested that it was not uncommon to cause delivery by the use of forceps or by the use of vacuum extractors or by a C-section. While the attending physician has the option of selecting the method that will properly accommodate the mother and the fetus, all of the factors that were present at the time must be examined to determine if the doctor in charge exercised the proper standard of care in

making the selection and effecting the delivery.

Standard of Care

The United States Court of Appeals for the Eighth Circuit has ruled that “[U]nder Missouri law, a plaintiff in a medical malpractice suit must prove that, by act or omission, the defendant failed to use that degree of skill and learning ordinarily used under the same or similar circumstances by members of his profession and that this negligent act or omission in fact caused the plaintiff’s injury.” Washington by Washington v. Barnes Hospital, 897 S.W.2d 611, 615 (Mo. 1995). See Sosna v. Binnington, 321 F.3d 742, 744 (8th Cir. 2003).

Discussion

The Court finds that the acts and omissions of Dr. Reed in the care of plaintiff during her labor and in the delivery of C.M. did not meet the standard of care required, and his negligent acts and omissions caused C.M.’s injuries.

The Court does not fault Dr. Reed for failing to be present at the time of plaintiff’s admission to the hospital, and his management of the labor of plaintiff with the assistance of residents and nurses at Barnes-Jewish Hospital. The standard of care requires that the patient be properly monitored and the treating doctor can exercise that standard of care by designating the responsibility to qualified persons in his absence. There are, however, factors in this case that would suggest that Dr. Reed should have been present earlier to monitor personally plaintiff’s labor.

It was obvious that plaintiff’s labor was somewhat prolonged. It was not until 17 ½ hours after admission, on February 1st at 2:00 a.m., plaintiff’s cervix was 4 cm. dilated. The FHR demonstrated moderate variability and accelerations. At 3:57 a.m. she had progressed to six cm.

dilation and although there was no evidence of hypoxia, the FHR panel showed a late appearing deceleration. At 4:30 a.m., the FHR had changed from the earlier 100 to 130 to 152 to 170. Dr. Reed was notified by telephone at that point of plaintiff's progress.

At 7:00 a.m., Dr. Reed was notified by telephone that C.M.'s FHR was 170. It was not until 10:35 a.m. when plaintiff's temperature reached 102.5 Fahrenheit and plaintiff was dilated to 8 cm. that Dr. Reed elected to attend his patient personally. The Court has previously found that Dr. Reed did not arrive at the hospital until sometime between 11:30 and 11:50 a.m. which was at least an hour after Nurse Holifield reported plaintiff's symptoms by phone at 10:35 a.m. There apparently was some conversation between Nurse Holifield and Dr. Reed that plaintiff may need a C-section. This conversation probably did occur as a member of the staff had plaintiff sign a consent for a caesarean section at 11:00 a.m.

Dr. Reed was attending plaintiff at 11:50 a.m. as the notes revealed that he had directed the plaintiff to "push." When that process did not cause delivery, Dr. Reed elected to utilize a vacuum extractor. Delivery was at 12:33 p.m., so 45 minutes elapsed between the time plaintiff began pushing and C.M. was delivered. The records show that at the time plaintiff began pushing when Dr. Reed was present, the fetal heart monitor indicated a late deceleration of C.M.'s heart beat and ultimately a fetal bradycardia. The rate stayed at 90 until noon, and sharply increased to 200 at 12:15 p.m. and to 210 at 12:20 p.m., indicating severe tachycardia.

The Court finds that had C.M. been delivered at 10:35 a.m. which was the time Nurse Holifield gave final telephone reports to Dr. Reed, C.M. would not have been damaged. The FHR pattern is alarming when there is a late deceleration followed by a fetal bradycardia, all of which occurred sometime between 11:30 a.m. and noon. As it took almost 45 minutes using the

vacuum extractor to effect the delivery, had Dr. Reed been at the hospital no later than 11:00 a.m., much if not all of the damage could have been avoided. Obviously, it could have been avoided had a caesarean section been performed by 11:00 a.m., as all agreed that that would have taken 10 minutes time.

Assuming as the testimony suggested that some of the damage to C.M. was caused by delivery trauma, the Court finds that it fell below the proper standard of care when Dr. Reed failed to order a caesarean delivery after the initial vacuum extractor did not operate properly. Nurse Holifield testified that it takes some time to set up the first vacuum extractor, and then to revert to a hand-held pump type extractor when the first was inoperative. Given the exigencies of the moment, Dr. Reed could have quite easily shifted to a caesarean procedure at that time, and avoided the subgaleal hemorrhage and possibly the ischemic injury.

Although this Court recognizes the long and productive career of Dr. Reed, it must find that he did not exercise the proper standard of medical care during the labor and delivery of plaintiff.

Defendant states that there must be a “but for” causation test to prove a causal connection between the act or omission and the plaintiff injury. Callahan v. Cardinal Glennon Hospital, 863 S.W.2d 852 (Mo. 1993). Thus, a plaintiff must show that the alleged injury would not have occurred “but for” the defendant’s conduct. The Court’s previous findings meet this test.

Damages

Past Medical Bills

The parties agree that C.M.’s past medical bills are \$63,494.19. The Court finds that they

are reasonable and were necessary for C.M.'s care. Either plaintiff or C.M. is entitled to recovery for these damages. Boley v. Knowles, 905 S.W.2d 86, 89 (Mo.banc 1995). The Court finds such reimbursement can best be used by C.M., and awards such damages to her.

The government argues that it is entitled to an off-set of 61.06% of the medical bills because the federal government contributed that percentage of these bills to Missouri Medicaid.⁸ Ordinarily in tort cases, Missouri follows the collateral source rule. Overton v. U.S., 619 F.2d 1299, 1305-09 (8th Cir. 1980). (Medicare payments were not from a collateral source because plaintiff had never contributed to the medicare program). See Manko v. U.S., 830 F.2d 831, 836 (8th Cir. 1987).

Although Medicare and Medicaid programs are different in application, this Court finds the collateral source rule should be applied the same way to each. See Romero v. U.S., 865 F. Supp. 585, 593 (E.D.Mo. 1994), Porter v. Toys 'R' Us - Delaware, Inc., 152 S.W.3d 310, 320, (Mo.App. 2004) (as modified).

Since neither C.M. nor plaintiff has contributed to the Medicaid program, the Medicaid payments were not from a collateral source and the government should receive a 61.06% credit on the medical bills of \$63,494.19 or \$38,769.55. Thus, C.M. shall receive past medical bills in the sum of \$24,724.64.

Future Economic Damages and Medical Care

⁸ The calculated federal medical assistance percentages that are used in determining the amount of federal, matching in-state medical assistance (Medicaid) for Missouri is 61.06% from October 1, 2001 through September 30, 2002. See 65 F.R. 69560. Although the labor and delivery was January 31, 2003 through February 1, 2003, the Court assumes the 61.06% rate was still in effect then.

Both parties presented witnesses who designed life-care plans for C.M. and witnesses who testified as to the present value of future care costs and diminished earning capacity. The testimony of C.M.'s expert is that the present value of those damages, i.e. future lost earnings and benefits, is between \$804,605.00 and \$2,152,276.00. The variance has to do with what C.M. would have earned as a high school graduate or as a college graduate.

C.M.'s witnesses state that the present value of her future medical and custodial care is between \$7,402,548.00 and \$11,030,177.00.

Defendant's experts determined that C.M.'s lost wages based on a high school education was between \$532,194.00 to \$744,483.00 and that the range if C.M. had a college diploma would be \$852,232.00 up to \$1,229,824.00. Under all of the circumstances in this case the Court finds that this issue should be based upon C.M. receiving a high school education.

C.M.'s life-care plan was submitted by Robert Voogt and Associates, Inc. Charles M. Linke, a PhD. economist used Voogt's life-care plan and the testimony of other witnesses to calculate the present value of C.M.'s diminished earnings capacity and her future care costs during her normal life expectancy. In determining present values, Linke used a net discount rate of zero to 1 %.

The lower bound present value including money earnings and fringe benefits with a high school education for a 32.2 year post-trial expected working life period was calculated to be \$804,605.00 and the present value of the upper bound was \$1,203,134.00. Dr. Linke found the present value of C.M.'s expected future care costs to range from the lower bound of \$7,402,548.00 to the upper bound of \$11,030,177.00.

Thomas R. Ireland, defendant's PhD. economist, used a net discount rate of 3 % in

calculating the present value of C.M.'s diminished earnings and future care costs. With a 3 % net discount rate, assuming a high school education, Dr. Ireland calculated C.M.'s lost earnings at \$532.194. Using the 3 % net discount rate, he also calculated the present value of Dr. Voogt's life-care plan for C.M. at \$3,212,816.00. Dr. Ireland also calculated the lost earnings of C.M. at a 3 % net discount rate including a minimum wage off-set at substantially less.

Christy L. Gibson, an R.N. consultant also prepared a life-care plan for C.M. Her projected anticipated costs were substantially less than those of Dr. Voogt. Dr. Ireland also projected the present value of Gibson's anticipated costs, again using the 3 % discount rate and this calculation was much lower than those of Dr. Voogt.

Considering the evidence in this case, and the Court's findings, the Court will award the following damages for C.M.:

1. Medical expenses \$24,724.64;
2. Future lost earnings \$532,194.00;
3. Present value of future medical needs \$1,606,408.00;
4. Non-economic damages \$552,000.00.

Total is \$2,715,326.64

In making the foregoing calculations, the Court finds the rationale of Dr. Ireland more persuasive and for future lost earnings applied the 3 % net discount rate for a high school student. Although there is a distinct possibility on the basis of the evidence that at some time in her adult life, C.M. could be employed at a minimum wage, or higher, the Court did not consider this possibility in its assessment.

In calculating the future medical expenses the Court also was persuaded by Dr. Ireland's

assessment of the present value of Dr. Voogt's life-care plan for C.M. at a 3 % net discount rate. That sum was \$3,212,816.00. The Court discounted this amount by one-half because it felt under all of the evidence, the estimated needs for C.M. were not as substantial as calculated by Dr. Voogt. For illustration, it appears that 61.06 % of plaintiff's current medical expenses were paid through the Medicaid program. The Court also finds that Medicaid or other third-party payers, such as a public school system, will bear a substantial portion of therapy costs for C.M. during her school years. C.M. also receives \$360/month in social security disability income.

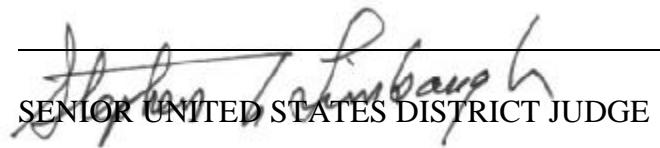
The Court is appalled, like several of the witnesses who testified for and in opposition to the plaintiff and C.M., that C.M. is not receiving speech therapy. Obviously, she will need it but the Court does not believe she will need it her entire projected life expectancy.

The Court also believes that C.M. will benefit from physical therapy and occupational therapy evaluations and treatment. These should not be required for an extended period of time. Although the Court agrees that C.M. has suffered some disability in her upper extremities the more realistic testimony was that she will ultimately recover and not have a serious disabling problem. C.M. appeared to the Court to be quite mobile as she was observed to run, jump and use her extremities in the courtroom. Many of the witnesses were in agreement as to her normal physical mobility for a youngster of her age at the time of trial.

On the basis of the evidence presented, the Court also believes that the substantial amounts recommended by Dr. Voogt for support care are unwarranted.

As to non-economic expenses, the Court calculated that \$4,000.00 per year for the next 10 years or \$40,000.00 plus \$8,000.00 per year for 64 years thereafter, or a total of \$512,000.00 making a total non-economic award of \$552,000.00 is more realistic.

Dated this 9th day of November, 2006.



SENIOR UNITED STATES DISTRICT JUDGE